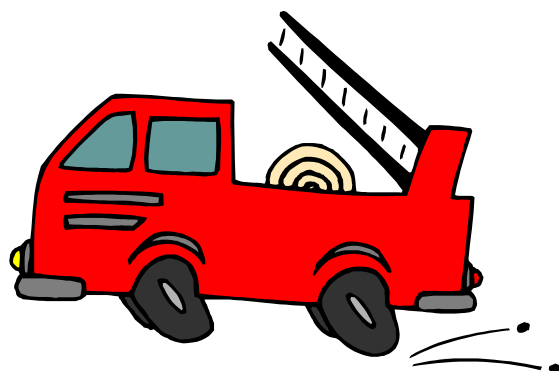


# Fire Department



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# FIRE MISSION, CORE SERVICES & GOALS












## MISSION:

The Fire Department's mission is to provide the citizens of the City of Detroit with a modern day, administratively and technically sound, world-class Fire Department capable of protecting life and property through the efficient use of emergency response resources. The Fire Department will afford pre-hospital medical service and enforce all laws, ordinances and regulations relating to fire prevention and suppression, as well as maintain a high state of emergency management preparedness through continued and sustained planning and training.

## CORE SERVICES:

Fire Department services are delivered through four divisions:

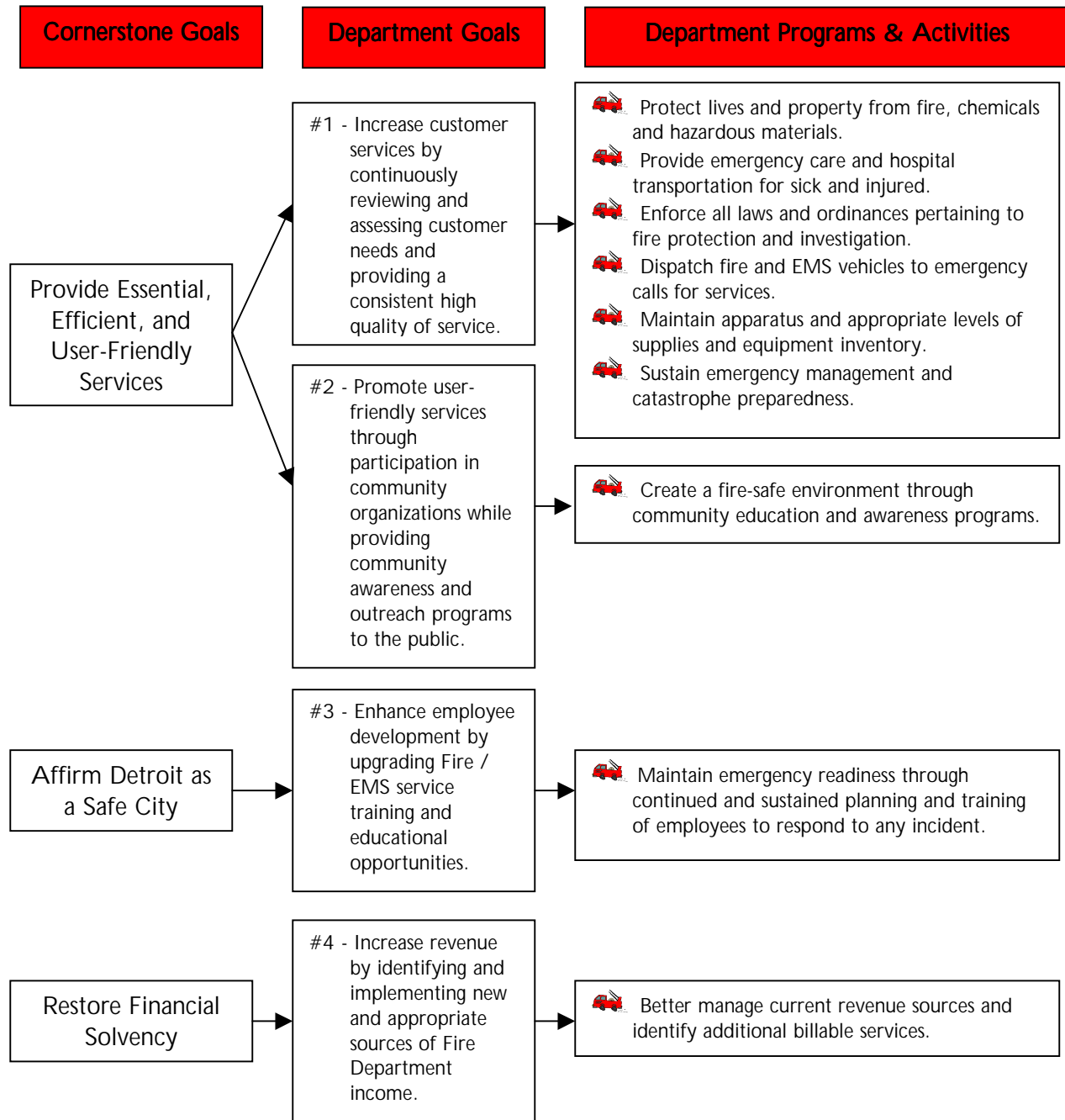
- ♦ Fire Suppression and Control, whose role is to ready equipment and personnel to quickly respond to the call for fire response, perform community relations, and other departmental support functions;
- ♦ Fire Prevention and Investigations, whose role is to enforce fire prevention and protection laws and ordinances, and investigate suspicious fires;
- ♦ Emergency Medical, whose role is to provide emergency care and hospital transportation for the sick and injured;
- ♦ Emergency Management, whose role is to plan, coordinate, and train others to deliver the appropriate response to catastrophes within the City of Detroit.

Fiscal Year 2001 in Brief:	
2000-2001 Accomplishments	2000-2001 Issues
 Instituted an anticipatory hiring program, which allows positions to be filled by trainees before they are officially vacant.	 Implementation of a Medical First Responder program continues to be delayed by the union's concern about the change in work conditions for its members.
 Staffed a liaison position to facilitate hydrant repairs with the Water and Sewerage Department.	 Evaluation of the workload and resource distribution between EMS and Fire personnel may require a modification of the Department mix.
 Decreased the age of Fire and EMS equipment through an aggressive purchasing program.	<b>Future Plans</b>
 Worked to prevent station closures due to par strength shortages by allowing firefighters to work voluntary overtime.	
 Placed the Hazardous Materials (Hazmat) team in service.	
	 Institute Citizen Advisory Committees at all fire houses with the goal of better incorporating firehouse activities into the community.
	 Implement a Computer Based Training program to allow firefighters the opportunity to earn needed continuous education credits during downtime at the firehouse.



## GOALS:

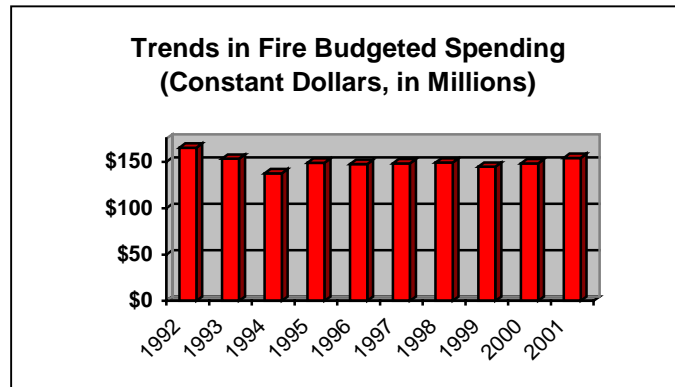
The chart below illustrates the Fire Department's program and activity alignment with the City's cornerstone goals.



 The remainder of this chapter examines the Fire Department's spending and staffing levels as well as its progress in achieving its stated goals.



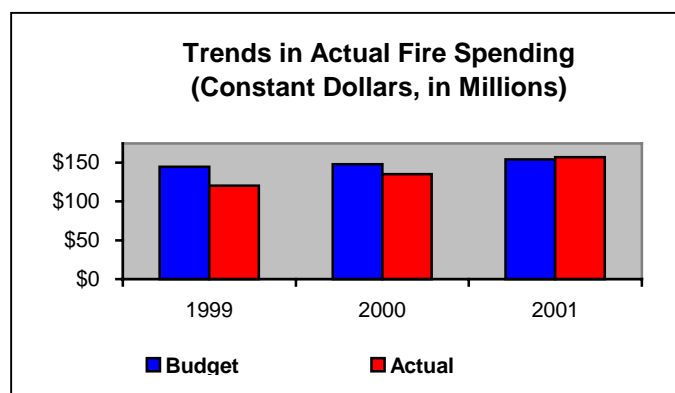
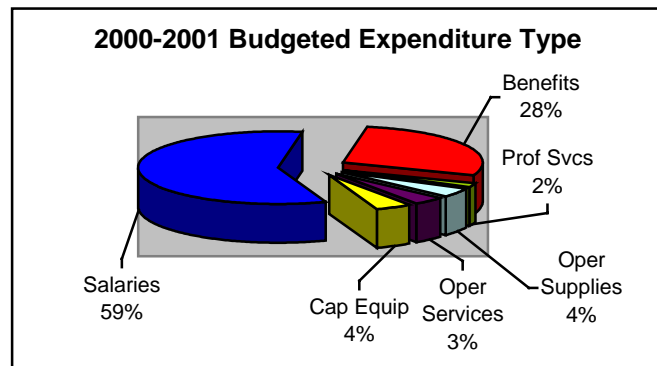
## SPENDING:



The Fire Department's ten-year average budgeted spending is \$149.6 million, while the five-year average is slightly lower at \$148.8 million. The Department's budget has averaged 5.66% of the City budget over the past ten years; although in four of the last five years, the Fire Department's portion of the overall budget has been below this average. Fire Department budgeted spending increased \$6 million between 2000 and 2001 to \$154.2 million.

The chart on the right shows the breakdown of planned Fire Department spending into expenditure types. In the 2001 fiscal year, salaries and wages accounted for 59% of the budgeted spending.

The percentages shown are close to the ten-year average with Employee Benefits decreasing 4% and Salaries and Wages, Operating Supplies and Capital Outlays each increasing 1%.



Actual spending, in two of the past three years, has been lower than budgeted spending.

Department spending on specific activities is discussed in the remaining pages of this chapter.

Approved Capital Improvement projects are shown in the following chart. 72% of the \$8.3 million approved over the past five years is for Fire Station repairs. The goal is to renovate five stations per year in each of the next five years.

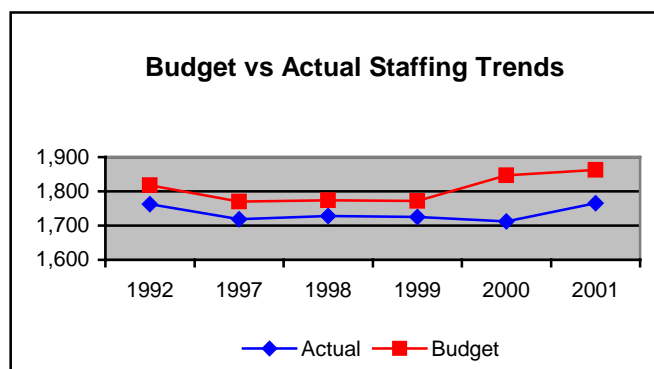
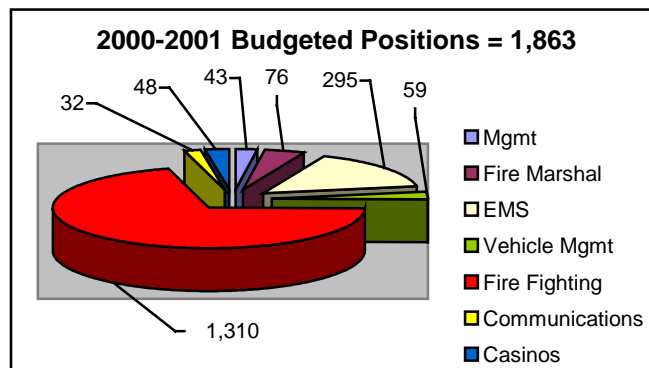


Name of Project	1997	1998	1999	2000	2001	Total
Fire Station Infrastructure	\$1.1	\$0.0	\$0.0	\$0.0	\$0.0	1.1
EMS Modular Quarters	0.2	0.0	0.0	0.0	0.0	0.2
Fire Station Repairs & Renovation	0.0	1.0	1.5	1.5	2.0	6.0
Police/Fire Training Facility	0.0	0.0	0.0	1.0	0.0	1.0
<b>Total</b>	<b>\$1.3</b>	<b>\$1.0</b>	<b>\$1.5</b>	<b>\$2.5</b>	<b>\$2.0</b>	<b>\$8.3</b>

## STAFFING:

The Fire Fighting Division accounts for 70% of the Department's 1,863 budgeted positions, while Emergency Medical Services account for 16% of the positions.

Casino Municipal Services fund 48 positions – 27 Firefighters, 10 fire Marshals, and 11 EMS.



In the 2000 fiscal year, budgeted positions finally reached the 1992 level. The variance between budgeted and actual positions increased in 2000 but decreased significantly in 2001 as more fire fighter training classes have been held.

Emergency Medical Services has grown by 44 positions since 1997.

Program specific staffing is discussed in the remainder of this chapter.

## FIRE GOAL #1: INCREASE CUSTOMER SERVICES BY CONTINUOUSLY REVIEWING & ASSESSING CUSTOMER NEEDS & PROVIDING A CONSISTENTLY HIGH QUALITY OF SERVICE



Very few citizens have required Fire Department assistance in the past year.

	Number of Responses	% Answering "Yes"
Percentage of Respondents Requiring Fire Assistance in the Past 12 Months	3,198	6%



A majority of citizens rate the City's overall fire protection and the fire response time as "Good" or "Very Good". Less than 10% rate the service as "Bad" or lower.

	Number of Responses	% of Citizens Rating Service "Very Good" or "Good"	% of Citizens Rating Service "Neither Good nor Bad"	% of Citizens Rating Service "Bad" or "Very Bad"
Satisfaction with Overall Fire Protection	2,546	64%	26%	9%
Satisfaction with Fire Response Time	1,972	71%	22%	6%

## FIRE FIGHTING ACTIVITIES:

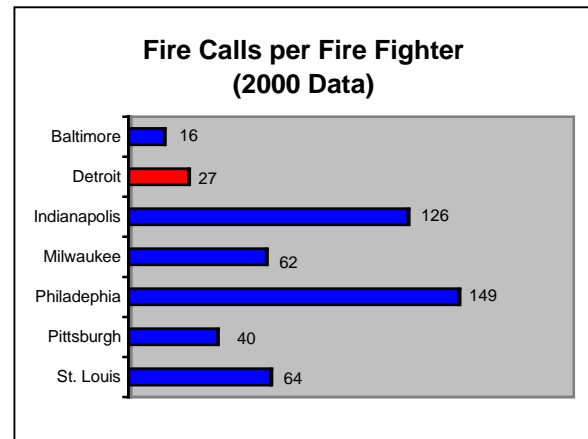
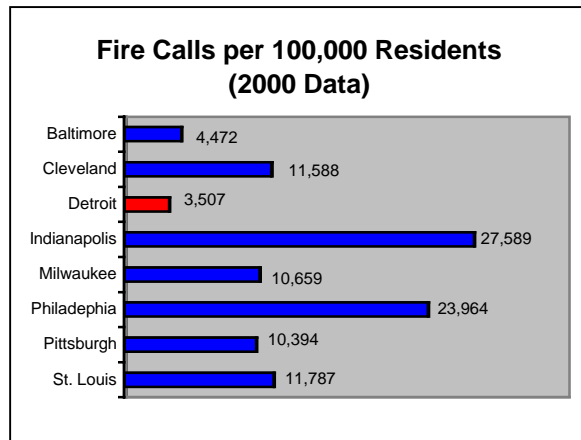


The Fire Fighting Division's central duty is to protect lives and property from fire, chemicals, and hazardous materials and provide rescue. Over the past five years, the number of fires has fluctuated between 14,927 and 12,395, with 2001 seeing the least number of fires. Hopefully, the trend will continue. The number of false alarms fluctuates also, but appears to be on an upward trend. The number of fires per 100,000 residents has decreased by nearly 200 over the past five years.

FIRE FIGHTING DIVISION WORKLOAD					
	1997	1998	1999	2000	2001
Number of Fires	14,732	14,122	14,122	14,927	12,395
Property Lost to Fire in Constant Dollars (Millions)	\$399.3	\$302.2	\$330.7	\$348.7	\$309.9
Number of False Alarms	10,026	12,271	10,484	10,755	10,786
Number of Hazardous Material Sites Surveyed	0	0	0	259	582
Number of Standard Operating Procedures Documented	30	30	30	38	41
Number of Fires per 100,000 Residents	1,510	1,460	1,463	1,569	1,313



The following charts show comparisons of the number of fire calls per 100,000 residents and number of fire calls per firefighter to determine if Detroit's firefighters have a similar workload to firefighters in other cities. The Detroit Fire Department responds to fewer fire calls per 100,000 residents than the comparison cities, and the number of fire calls per fire fighter is lower than most of the comparison cities. The benchmarking study found that it is not uncommon for a city to dispatch an engine or ladder truck on EMS calls, which raises that city's number of "fire response calls" and the firefighter workload. Detroit does not follow this practice.



The National Fire Protection Association recommends that each fire response vehicle be manned by four firefighters. To meet this recommendation, Detroit needs to have 286 firefighters on duty (par strength) to fully staff all firehouse equipment. When staffing levels are less than par strength, extra vehicles must be dispatched to fires and in some cases firehouses are closed for the shift. These actions affect the Department's ability to respond to fires quickly and can impact firefighter safety. Efforts to consistently meet the par requirements include filling vacant firefighter positions quickly and using firefighters willing to work voluntary overtime to staff short shifts.



Budgeted firefighter positions have increased by 22 positions since 1997, while the Department continues to maintain a low vacancy rate. In four of the past five years, vacancy rates have remained below 5% and in 2001 the vacancy rate was 3.6%. Firefighter overtime increased in 2001. There were three firefighter deaths between 1997 and 2001, and 1,400 injuries. Fire Department management reported that the average unit response time for fire suppression companies is 4 minutes.

FIRE FIGHTING OPERATIONS					
	1997	1998	1999	2000	2001
Budgeted Firefighters	1,315	1,317	1,310	1,337	1,337
Actual Firefighters	1,284	1,274	1,260	1,240	1,289
Average Par Strength	260	260	260	260	264
Average Response Time – Dispatch to Arrival	not available	not available	not available	not available	Approx 4 min.
Average Response Time – Call to Arrival	not available	not available	not available	not available	Approx 4 min., 34 sec.
Firefighter Overtime in Constant Dollars	not available	not available	\$325,994	\$370,256	\$532,717
Number of Firefighter Injuries & Deaths	125	274	278	208	518



## EMERGENCY MEDICAL SERVICE:



Most Detroit citizens have not required Emergency Medical Service in the past 12 months.

Percentage of Respondents Requiring EMS in the Past 12 Months	Number of Responses	% Answering "Yes"
	3,153	16%

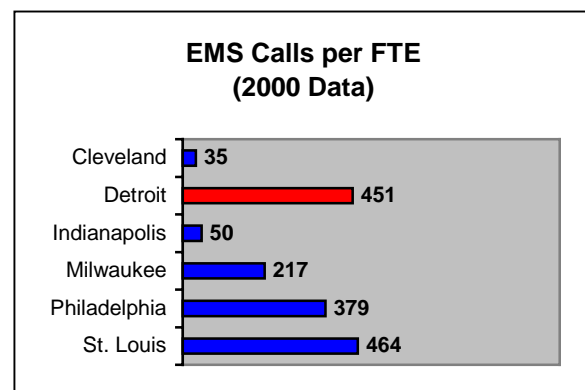
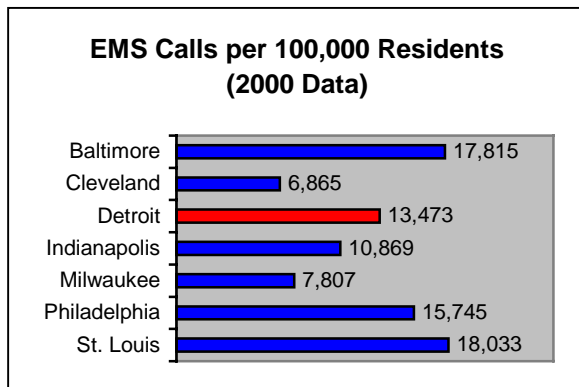


Around half of the citizens rate EMS service and EMS response time as "Good" or "Very Good", while around one-fifth of the citizens rate the service and response time as "Bad" or "Very Bad".

	Number of Responses	% of Citizens Rating Service "Very Good" or "Good"	% of Citizens Rating Service "Neither Good nor Bad"	% of Citizens Rating Service "Bad" or "Very Bad"
Satisfaction with EMS Service	2,268	47%	31%	22%
Satisfaction with EMS response time	2,009	55%	26%	19%



Again, the peer city comparison figures should be compared carefully. The number of EMS calls that Detroit responds to is comparable to the peer cities. Detroit's number of EMS calls per FTE seems high, however, several of the comparison cities use firefighters with EMT and paramedic training as first responders to EMS calls. This practice increases the number of FTEs responding to EMS calls, thereby reducing the calls per FTE.



Calls for medical response increased 4% between 1997 and 2001, with the biggest increase being in non-emergency calls, which have increased by 256%. The number of medical response calls per 100,000 residents has increased by 7% over the past five years due to a combination of the increased calls and decreased population. Actual staffing levels have not kept up with budgeted positions; budgeted positions have increased 17% (44 positions), while actual staffing has increased 10% (25 positions). The number of calls per FTE has decreased 6% due to the additional staff that was added.



EMERGENCY MEDICAL SERVICES					
	1997	1998	1999	2000	2001
Number of Medical Responses (Dispatch, FD Mgmt)	122,603	123,104	125,497	128,180	126,994
Number of Hospital Transportation Runs	71,000	67,375	67,375	69,023	76,196
Number of Non-Emergency EMS Calls	4,481	6,767	11,318	15,060	15,954
Budgeted EMS Staff	262	262	262	295	306
Actual EMS Staff	248	264	261	284	273
Number of EMS Calls per 100,000 residents	12,569	12,726	13,004	13,475	13,449
Number of EMS Calls per Actual FTE	494	466	481	451	465



To respond to calls more efficiently, EMS uses historical call trends to predict usage demand. The information is used to vary the number of in-service units depending on the time and the day of the week.



EMS's goal is to respond to a call within 9 minutes, 90% of the time. The EMS Division defines response time as the period between receipt of the 9-1-1 call and the arrival of the EMS unit at the scene; another definition of response time is the period between the unit dispatch and arrival at the scene. Fire Department management reports that the average unit response time is 9 minutes, although the range of response times were not available when this report went to print.



The cost of the EMS service per call has risen 22% between 1997 and 2001. This increase is due to the upgrade of EMS vehicles to Advanced Life Support (ALS), the increased number of vehicles in service at all times, and the increased number of trained paramedics needed to man these vehicles.

EMERGENCY MEDICAL RESPONSE					
	1997	1998	1999	2000	2001
Average Number of EMS Units in Service	20.25	22.25	21.65	22.35	23.05
Average Response Time – Dispatch to Arrival	not available	not available	not available	not available	Approx 9 min.
Average Response Time – Call to Arrival	not available	not available	not available	not available	Approx 10 min., 42 sec.
Number of EMS Calls per Vehicle	6,054	5,533	5,797	5,735	5,510
Number of EMS Calls per Square Mile	889	893	910	930	921
Cost of EMS per Incident in Constant Dollars (Including Casino Services)	\$141.40	\$170.60	\$159.78	\$164.47	\$172.59
Percentage of EMS Responders Certified as Paramedics	50%	66%	43%	56%	63%



Due to the City's increased investment in EMS trucks and personnel, EMS has been able to complete the upgrade of all ambulances to ALS capabilities. ALS units are equipped with EKGs, defibrillators, advanced airway and respiratory control equipment, carbon dioxide and blood sugar monitors, and pediatric life support equipment. A paramedic and an emergency technician staff each ALS unit. Only the paramedic can perform invasive procedures or administer drugs. EMS plans to continue a 3-year replacement policy on ambulances, when the vehicles have logged between 140,000 and 150,000 miles.



## FIRE INSPECTION:



The Fire Marshal Division enforces all City laws and ordinances pertaining to fire protection. The city code specifies the types of activities that must be inspected and the frequency. Inspector assignments range from:

- ◆ General Inspections - New construction plan review and emergency cars responding to citizen complaints
- ◆ Hazardous Materials Inspections – Tankers making deliveries and gas stations
- ◆ Public Assembly Inspections – Restaurants, Bars, Clubs, Special Events
- ◆ Institutional Inspections – Day care, schools, nursing homes
- ◆ Court – Testifying and Enforcement through re-inspection



If the inspector determines that a building or gathering is not in compliance with Life Safety codes, the owner is given 24 hours to bring the fire safety situation into compliance. If the owner does not make an effort to comply with the code, a violation is issued. If compliance is not forthcoming, a court appearance ticket is issued.



Budgeted inspector positions have increased by 27%, while filled inspector positions have increased 10%. Between 1997 and 2001, the number of buildings inspected has decreased by 51% and the amount of additional inspection work has decreased by 32%. Fewer violations are being issued, while more of the issued violations are resulting in a court ticket or in a court case. The number of inspections per inspector has declined by 44%.

FIRE MARSHAL INSPECTIONS					
	1997	1998	1999	2000	2001
Public and Private Buildings Inspected	13,464	13,399	9,909	11,611	6,553
Additional Inspection Work	31,797	29,203	24,396	21,656	21,684
Notice of Violations	2,426	1,713	1,666	1,527	905
Court Tickets & Cases	709	476	451	441	524
Budgeted Inspector FTEs	30	30	30	38	38
Actual Inspector FTEs	29	29	28	26	32
Percentage of Violations Resulting in Court Ticket or Court Case	29%	28%	27%	29%	58%
Number of Inspections per Inspector	1,669	1,545	1,301	1,355	927

## INVESTIGATION OF SUSPICIOUS AND INCENDIARY FIRES:



The Fire Marshal Division reviews all fire incidence reports for those indicating fatality, undermined cause, or suspected arson. Staffing levels do not allow all suspicious fires to be investigated; however, those that have fatalities or where the use of accelerants is suspected receive the highest priority.



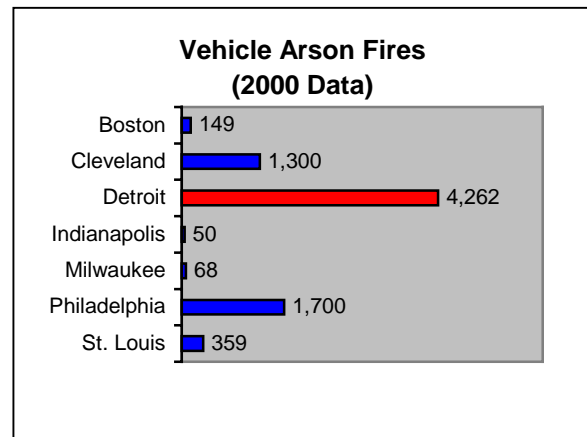
The number of fires identified as suspicious has increased 8% since 1997, while the number of suspicious fires investigated has grown to 60%. The number of warrants issued has declined 38%, convictions have declined 43%, and closed cases have declined 46%. The number of fires investigated per FTE has increased slightly, while the number of convictions per FTE has decreased 38%. The decreased conviction rate has resulted in an increase in the cost of arson investigations per conviction.



SUSPICIOUS & INCENDIARY FIRES					
	1997	1998	1999	2000	2001
Arson Fires	6,232	6,309	6,397	6,032	6,731
Property Value Lost in Arson Fires in Constant Dollars (Millions)	\$118.6	\$90.7	\$98.4	\$67.3	\$63.4
Number of Fires Investigated	2,611	2,184	2,121	2,522	2,676
Percentage of Incendiary Fires Not Investigated	62%	35%	33%	42%	40%
Number of Warrants Issued	278	264	197	183	173
Number of Arson Convictions	167	102	176	115	95
Number of Cases Closed	427	113	248	233	230
Number of Budgeted Arson Inspectors	21	21	21	21	21
Number of Actual Arson Inspectors	21	18	18	19	20
Number of Fires Investigated per FTE	124	121	118	133	134
Number of Convictions per FTE	8	6	10	6	5
Cost of Arson Investigation per Conviction in Constant Dollars	\$11,199	not available	\$8,713	\$14,040	\$19,608



Historically, Detroit experiences a high number of vehicle arsons. In April 2001, the State of Michigan passed the Fire Vehicle Arson Bill, which requires the owner of a vehicle involved in a fire with more than \$2,000 damage to make a statement of non-involvement to the fire department before the insurance company can payout on the claim. Cities with similar requirements have seen an 80% decrease in the number of vehicle arson incidents.



By the end of 2001, the Arson Investigation Unit had conducted 245 interviews with owners of vehicles involved in arson fires. The department has received a grant to help defer the overtime costs incurred to administer this program. Although it is too early to see the results of this new program, its success will be tracked in subsequent years.

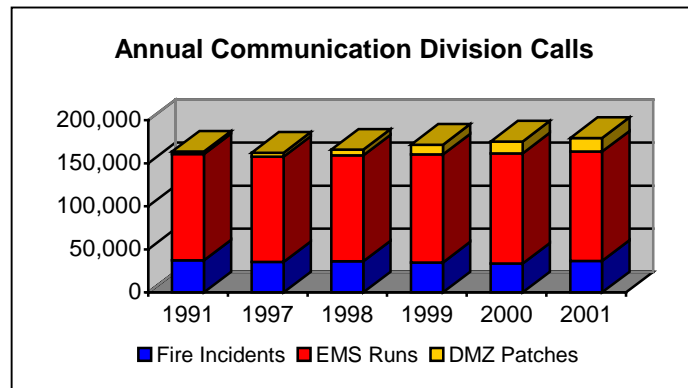
VEHICLE ARSON					
	1997	1998	1999	2000	2001
Number of Vehicle Arson Fires	4,347	4,221	4,667	4,262	4,389
Number of Vehicle Arson Fire Investigations	1,159	837	899	974	1,019
Number of Interviews Conducted					245



## DISPATCH SERVICES:



Emergency calls are received on the City's 9-1-1 line. The operator answering the call follows a script to determine the nature of the call, the address, and the type of response needed. If the call is coded for Fire or EMS response, it is transferred to the Fire Department's Communication Division from which both Fire and EMS units are dispatched.



The Fire Fighting Division notifies the dispatchers each morning of firehouses that are closed and equipment that is out of service. When a call is transferred to Fire Dispatch, the Computer Aided Dispatch (CAD) system recommends unit assignments based on resource availability and incident location. In some cases, the dispatcher will manually change the recommendation based on known staffing and equipment problems to ensure that the proper personnel and apparatus are sent to the scene.



Fire Fighting units are notified of dispatch via their firehouse computer printer. No alarms sound. If the unit has not responded to the dispatch within 60 seconds, the dispatcher will radio the unit to insure they are in route to the incident. All units have mobile dispatch computers which allow them to report the status of their response and when they are finished with a fire and free to respond to other calls.



There are six dispatchers on duty at all times. Four dispatchers handle Fire calls, while two dispatchers handle EMS calls. Fire and EMS dispatchers are cross-trained. Fire dispatches are more complicated than EMS dispatches due to the amount of equipment that must respond. The cost to dispatch a run has decreased 15% over the past five years.

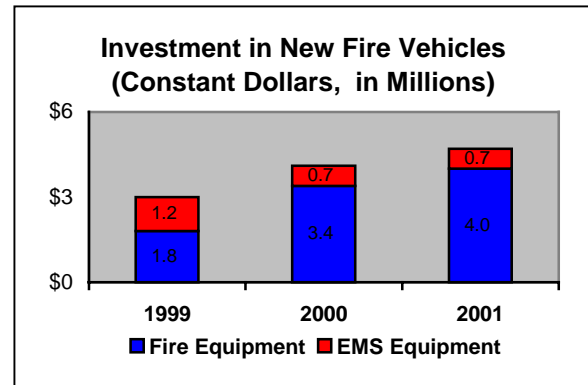
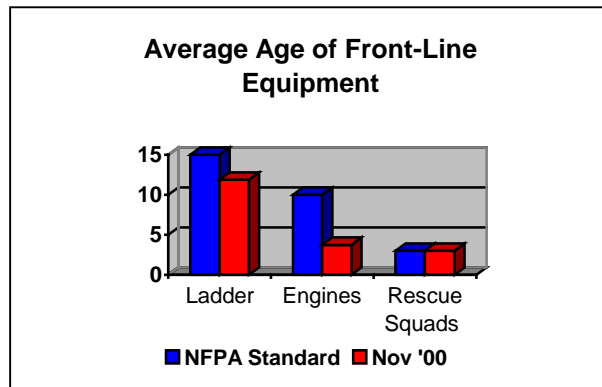
FIRE COMMUNICATIONS					
	1997	1998	1999	2000	2001
Number of Fire Dispatches	35,166	35,958	34,364	33,364	36,540
Number of Dispatches per Hour	4.01	4.10	3.97	3.81	4.17
Average Time to Dispatch a Fire Call	not available	not available	not available	not available	34 seconds
Number of EMS Dispatches	122,603	123,104	125,497	128,180	126,994
Number of Dispatches per Hour	14.00	14.05	14.33	14.63	14.50
Average Time to Dispatch an EMS Call	not available	not available	not available	not available	1 minute, 42 seconds
Cost to Dispatch a Run in Constant Dollars	\$24.53	\$25.35	\$19.26	\$21.71	\$20.83



## APPARATUS MAINTENANCE AND SUPPLIES AND EQUIPMENT INVENTORY:



The Fire Department's Apparatus Shop strives to meet the National Fire Protection Association (NFPA) standards for effective, safe and reliable apparatus. NFPA suggests an apparatus equipment life expectancy range depending on usage and maintenance. In no case should the equipment be over 25 years old. Detroit has made a commitment to update Fire Department equipment to NFPA standards. To eliminate the need for excessive investment in equipment each year, the Fire Department has established an annual replacement schedule.



The Apparatus Shop is responsible for maintaining and repairing all Fire Department vehicles. The shop is implementing an electronic preventative maintenance program, which will provide a more efficient method of tracking mileage, repairs and costs for individual vehicles. Frequent repair parts are being identified and will be stocked in the storeroom.

APPARATUS SHOP					
	1997	1998	1999	2000	2001
Cost of Apparatus Repairs in Constant Dollars (Millions)	\$3.8	not available	\$4.0	\$3.8	\$4.0
Number of Fire Department Vehicles	256	297	297	245	279
Number of Garage Maintenance Reports	26,848	22,000	22,000	26,848	23,251
Number of In-house Apparatus Repairs	22,021	25,000	25,000	22,021	20,235
Number of Budgeted Apparatus Repair FTEs	42	42	41	41	43
Number of Actual Apparatus Repair FTEs	40	43	40	40	39
Number of Repairs per Vehicle	104.88	74.07	74.07	109.58	83.34
Number of Vehicles per Apparatus Repair FTE	6.40	6.91	7.43	6.13	7.15
Average Maintenance Cost per Vehicle in Constant Dollars	\$15,037	not available	\$13,476	\$15,395	\$14,479
Average Time to Complete a Maintenance Order	not available	not available	not available	not available	7 days



The Apparatus Shop is responsible for maintaining an inventory of department supplies and replacement parts. The inventory ranges from office supplies to fire station bedding, from fire fighting gear and equipment to fire engine brake drums and fire hose. The department is in the process of



establishing a more effective inventory system to manage the diverse inventory types and to insure that items used frequently are stocked. Plans also include more efficient methods of delivering supplies to the firehouses.

## EMERGENCY PREPAREDNESS AND READINESS:



The Office of Emergency Management operates under the auspices of the Federal Emergency Management Agency (FEMA), the Michigan State Police, and the Mayor's Office. Its mission includes mitigating, preparing, responding and recovering from emergency situations.



Division responsibilities include:

- ◆ Updating the City's basic emergency plan annually as required by SARA Title III. Emergency response resources are tested and evaluated through control group exercises of simulated disaster situations. Peers critique the groups' response and feedback is provided to the City departments and to the mayor.
- ◆ Coordination of the local emergency planning committee (LEPC) actions. Any facility that possesses a quantity of hazardous materials greater than the EPA established threshold is required to file an emergency plan. If any hazardous chemicals are released into the air, the facility must notify LEPC so the emergency plan can be enacted. LEPC also facilitates the material safety data sheet (MSDS) collection under the Community Right To Know Requirements.
- ◆ Overseeing the City's 41 emergency sirens.
- ◆ Interaction and assistance with community and industry groups to plan emergency responses.
- ◆ Activation of the City's Emergency Operation Center.



The City has shown an increased recognition of the value of Emergency Management. This Division's spending has increased 380% over the past five years, and Division staffing has tripled. The number of emergency training sessions held were higher in the 2000 fiscal year due to Y2k concerns. The number of 302 sites with plans was not available when this report went to print.

EMERGENCY MANAGEMENT					
	1997	1998	1999	2000	2001
Cost of Emergency Management in Constant Dollars	\$97,756	not available	\$310,780	\$486,475	\$468,940
Number of Emergency Management Training Sessions Held	10	10	15	30	15
Number of People Trained in Emergency Management	350	350	525	1050	525
Number of Budgeted Emergency Mgmt FTEs	2	2	6	6	6
Number of Actual Emergency Mgmt FTEs	1	1	6	6	6
Number of 302 Sites Within the City	not available	not available	137	150	154
Percentage of 302 Sites with Emergency Plans	not available	not available	not available	not available	not available

## FIRE GOAL # 2: PROMOTE USER-FRIENDLY SERVICES THROUGH PARTICIPATION IN COMMUNITY ORGANIZATIONS WHILE PROVIDING COMMUNITY AWARENESS & OUTREACH PROGRAMS TO THE PUBLIC



The Fire Department does not advertise its community education programs for fear of being swamped with requests that it cannot fill. Only 11% of Detroiters have attended a Fire Department community outreach program.

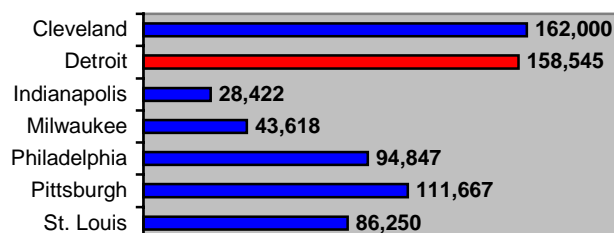
	Number of Responses	% Answering "Yes"
Percentage of Citizens Who Have Attended Fire Department Community Outreach Programs	3,148	11%



Research conducted by the NFPA supports the theory that public education of life safety tips does reduce fire injuries and deaths. Detroit's Fire Department offers education and community awareness programs that are broad reaching -

- ◆ The Community Relations and Fire Marshal Divisions present fire related education programs.
- ◆ The Emergency Medical Services Division conducts outreach programs aimed at broader health issues.
- ◆ The Emergency Management Division assists individuals and groups in preparing for emergency situations.

**Ratio of Citizens to Fire Education Staff Person (2000 Data)**



A majority of citizens rated the Fire Department's community outreach programs as "Good" or "Very Good", while 12% rated the programs as "Bad" or "Very Bad".

	Number of Responses	% of Citizens Rating Service "Very Good" or "Good"	% of Citizens Rating Service "Neither Good nor Bad"	% of Citizens Rating Service "Bad" or "Very Bad"
Quality of Community Outreach Programs	1,309	51%	37%	12%

### COMMUNITY RELATIONS DIVISION:

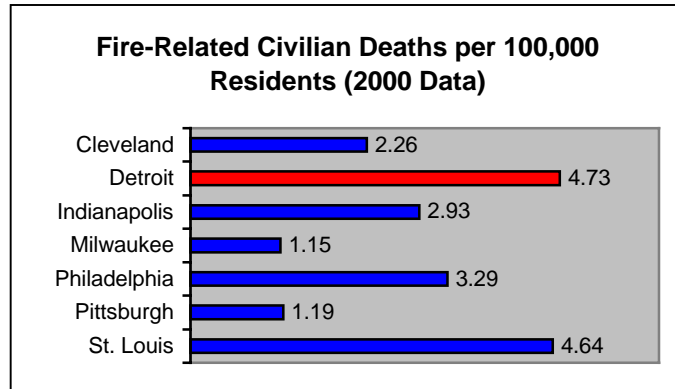


The Community Relations Division presents education and awareness programs to seniors, children, block clubs and community meetings. Ongoing programs include:

- ◆ Fire Safety Education presentations that teach prevention, detection and evacuation;
- ◆ Mobile Fire Safety House to teach hands-on prevention, detection and evacuation skills;
- ◆ Arson Awareness Program
- ◆ Career Opportunity Program
- ◆ Fire Station tours



- ◆ Fire Apparatus participation in Community Events
- ◆ Community Parades
- ◆ Juvenile Fire Setter Counseling
- ◆ Smoke Detector Installation Program for low-income residents
- ◆ Jr. Fire Cadet program offered in conjunction with the Employment and Training Department



FIRE COMMUNITY OUTREACH PROGRAMS					
	1997	1998	1999	2000	2001
Number of Programs and Presentations	1,003	1,479	1,402	1,662	1,347
Number of Participants in Education Programs (Excluding School Assemblies and Parades)	3,285	6,495	6,492	4,144	6,827
Number of Budgeted Community Relations FTEs	4	4	4	4	4
Number of Actual Community Relations FTEs	4	4	4	4	4
Number of Residential Fires	4,219	4,147	4,104	4,147	3,898

## FIRE MARSHAL DIVISION:



The Public Instruction Section of the Fire Marshal Division provides evacuation and technical training through lectures, training and demonstrations to neighborhood organizations, senior citizen hi-rises and health care facilities.

FIRE MARSHAL COMMUNITY TRAINING					
	1997	1998	1999	2000	2001
On-Site Training Programs and Special Training	169	210	210	1,000	1,032
Special & Miscellaneous Public Instruction Assignments	152	200	200	500	2,38
Budgeted Full-Time Public Instruction Staff	1	1	1	1	3
Actual Full-Time Public Instruction Staff	1	1	1	1	2
Number of Non-Residential Structural Fires	1,191	1,198	1,174	1,195	871



## EMERGENCY MEDICAL SERVICES:



Public CPR training programs are promoted and facilitated through the combined efforts of the Fire Department, the Local Emergency Planning Committee, local hospitals, American Red Cross and the American Heart Association



EMS volunteers host Camp 9-1-1, a two-day day camp targeting kids between the ages of nine and twelve that gives them the opportunity to learn about the field of emergency care. Leadership and First Aid training are covered during the course of the camp.

EMERGENCY MEDICAL SERVICES COMMUNITY TRAINING					
	1997	1998	1999	2000	2001
Participants at Camp 9-1-1	35	95	105	275	90
Number of CPR Training Programs Offered to Citizens and City Departments	4	4	12	26	28
Number of CPR Training Participants	410	584	123	130	400
Number of First Responder Training Courses Offered to Fire and Police Personnel	3	2	2	2	4
Number of Infection Control Training Courses Offered	4	3	4	4	5
Number of Staff Member Devoted to Community Outreach	not available	not available	1	1	1

## EMERGENCY MANAGEMENT:



Emergency Management staff participates with the public, city agencies, and business organizations to help plan for emergency situations.

EMERGENCY MANAGEMENT PUBLIC EDUCATION					
	1997	1998	1999	2000	2001
Number of Training Sessions Given to the Public or to City Departments	10	15	30	15	13
Number of Industry Group Training Sessions Hosted or Attended	9	11	23	13	12

## FIRE GOAL #3: ENHANCE EMPLOYEE DEVELOPMENT BY UPGRADING FIRE/EMS SERVICE TRAINING & EDUCATION OPPORTUNITIES



The citizens of Detroit are the ultimate beneficiaries of Fire and EMS training efforts. Well trained EMS, fire and emergency management employees save lives and reduce property loss.

### EMERGENCY MEDICAL SERVICE EMPLOYEE DEVELOPMENT:



Two 12-week training academies are run each year for new EMS employees. The upgrade of response units to Advanced Life Support (ALS) capability has translated into a skill upgrade for EMS personnel, as one paramedic and one EMT man each vehicle. Paramedics must complete 45 hours of continuing education every three years to maintain their state certification, while technicians are required to complete 35 hours of continuing education.



Investment in EMS training has decreased 32% since 1997, while the number of budgeted trainers has remained constant and spending per FTE has decreased 38%. Fire Department management reports that each EMS FTE received an average of 57 hours of training in 2001, even though training hours have declined 15% from 1997 levels.

EMERGENCY MEDICAL SERVICES TRAINING					
	1997	1998	1999	2000	2001
Cost of EMS Training in Constant Dollars	\$192,780	not available	\$156,485	\$181,757	\$131,779
Number of EMS Training Classes Held	not available	not available	not available	not available	not available
Number of EMS Training Hours	3,000	3,000	3,000	7,448	2,542
Percentage of EMS Employees Receiving ALS Training	50%	66%	43%	56%	63%
Number of Budgeted EMS Trainers (including clerks)	3	3	3	3	3
Number of Actual EMS Trainers	3	3	2	3	2
Cost of EMS Training per FTE in Constant Dollars	\$777.34	not available	\$599.56	\$639.99	\$482.71
Number of Training Hours per FTE	not available	not available	not available	not available	57.00

### FIRE FIGHTER EMPLOYEE DEVELOPMENT:



Trial Firefighters are sent to a 16-week training course at the Training Academy. NFPA 1001, "Essentials of Fire Fighting" sets minimum curriculum standards and hours. The Michigan State Fire Marshal's Office has modified the coursework to include 227 hours of classroom and practical training. Detroit's version of Basic Training encompasses 640 hours of training; upon completion of the course, the trial firefighter is certified in Fire Fighter I and II, as well as Medical First Responder and Hazardous Materials (Haz Mat). Following the successful completion of the Basic Training and passing a test, new firefighters are put on probationary duty. Following a one-year term of employment, probationary firefighters become full-fledged firefighters at a graduation ceremony.



In April 2001, the Training Academy introduced an in-service training program that is administered by officers at each station house. This training program utilizes lesson plans developed by the International Fire Service Training Association covering 19 basic, every day fire fighting topics and is to be covered over a 12-month cycle. Each house has been given an instructor's guide, an "Essentials of Fire Fighting" book, and the lesson plans. The officer administers the assigned lessons over a one-month period. At the end of the month, an instructor from the training academy goes to the firehouse to administer a written test.



The Fire Department has installed a computer based training program at all firehouses. The firefighter logs into the computer to complete the course work. When the course is completed, firefighter knowledge is tested through scenarios or written exams administered by the Training Division. At this time, fire fighters can take the required annual Haz Mat Refresher course on the computer terminal. Additional training modules will be implemented.



Over the past five years, the City has increased its investment in Firefighter training by increasing spending and nearly doubling the training staff. Spending on training per firefighter has increased by 123%. The increased training efforts should result in a reduction in the number of firefighter injuries and deaths, as well as an increase in the interval between accidents. This was not the case in 2001.

FIRE FIGHTER TRAINING					
	1997	1998	1999	2000	2001
Cost of Fire Training in Constant Dollars	\$429,422	not available	\$441,004	\$600,452	\$959,525
Number of Basic Fire Training Sessions Held	3	2	2	2	3
Number of New Fire Recruits	37	19	84	117	not available
Number of Training Classes Held	55	25	12	94	85
Number of On-Line Modules Completed Successfully					12
Number of Training Hours Completed	not available	not available	not available	not available	9,832
Budgeted Fire Training FTEs	6	6	11	11	11
Actual Fire Training FTEs	4	5	6	8	11
Number of Uniformed Injuries	123	274	278	208	517
Number of Uniformed Deaths	2	0	0	0	1
Cost of Training per Fire FTE in Constant Dollars	\$334.44	not available	\$350.00	\$484.24	\$744.40
Number of Fires between Injuries	120	52	51	72	24

## FIRE MARSHAL EMPLOYEE DEVELOPMENT:



Fire Inspectors are required to complete a specialized certification program. After six months of employment, all trainees are sent to Fire Inspector I training at the Academy. The course covers two weeks of class training followed by two weeks of in-service training where the trainee conducts inspections and is rated by a fellow inspector. Following one year of employment, Fire Inspectors are sent to a training course administered by the State of Michigan. State certification is required to conduct inspections of public institutions such as day cares, hospitals and nursing homes.



FIRE MARSHAL TRAINING					
	1997	1998	1999	2000	2001
Number of Inspector Trainees	1	3	3	8	8
Number of Inspectors with Fire Inspection I Certification	1	3	3	8	7
Number of Inspectors with State Certification	2	1	4	9	7



Arson Investigators attend the Police Academy to learn general and arson investigation skills. Certification is awarded through a state program.

## LEADERSHIP AND PROMOTIONAL TRAINING:



Historically, fire officer promotions have been awarded by seniority, rather than by merit. As fire fighters moved up the promotional ladder, on-the-job training was the only training requirement to prepare the officer for more responsibility later in their career. Attendance at leadership and management courses was voluntary rather than mandatory, and department management hoped for positive word of mouth reviews to help fill the classes.



The Firefighter contract approved in the fall of 2001 does address a minimum competency level for officers. Fire Department management will develop standards for the level of training required for each position, and the Training Division will provide training to meet those standards.

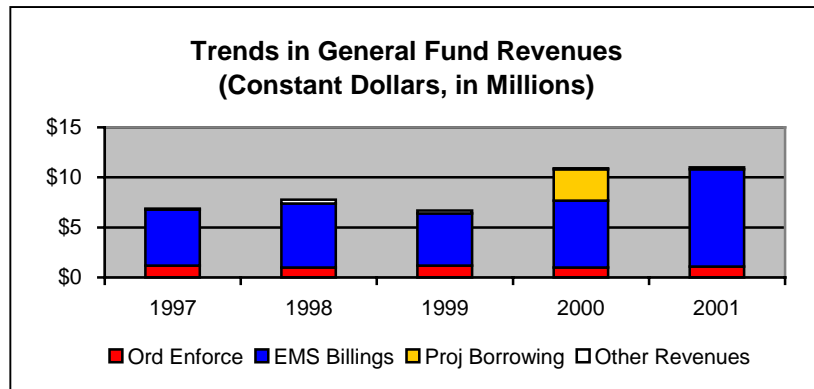
LEADERSHIP TRAINING					
	1997	1998	1999	2000	2001
Number of Fire Officer I Training Courses Offered	not offered	not offered	not offered	1	1
Number of Attendees at Fire Officer 1 Training				0	6
Number of Fire Officer II and III Training Courses Offered	not offered	not offered	not offered	not offered	not offered
Number of Promotions	28	78	90	108	123



Fire Department personnel have attended the Executive Fire Officer Training Program at Eastern Michigan University. The Training Academy is working with Wayne County Community College to count Fire Academy training courses toward an Associates Degree.

## FIRE GOAL #4: INCREASE REVENUE BY IDENTIFYING & IMPLEMENTING NEW & APPROPRIATE SOURCES OF INCOME

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The Fire Department's increased revenues can be traced to an increase in EMS revenue collections rather than to new sources. In 2000, EMS contracted with a new company with a better collection record to collect EMS billings. At the same time, the EMS Division implemented a "Run Sheet Derby" program where monthly cash incentives are randomly paid to technicians and paramedics for run sheets that are completed legibly and correctly. This incentive program has greatly improved the quality of information on the run sheet, which has aided the collection company's efforts.